November 20, 2002

RE: Forest River 087-15238-00052

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY

Forest River, Inc.
402 Lehman Avenue
Topeka, Indiana 46571

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 087-15238-00052	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: November 20, 2002

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a recreational vehicle manufacturing operation.

Authorized Individual:	William Conway
Source Address:	402 Lehman Avenue, Topeka, Indiana 46571
Mailing Address:	P. O. Box 3030 Elkhart, Indiana 46515-3030
Phone Number:	219-533-5934
SIC Code:	3792
County Location:	LaGrange
County Status:	Attainment or unclassifiable for all criteria pollutants
Source Status:	Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) RV assembly area, processing finished recreational vehicles at a maximum rate of 1.5 vehicles per hour (36 vehicles per day);

(b) One (1) woodworking process, processing pre-finished lumber at a maximum rate of 600 pounds per hour; and

(c) Three (3) 0.6 MMBtu/hr natural gas fired space heaters, identified as A1, A2, and A3, with emissions exhausted through Stacks A1, A2, and A3.

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

(e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

(a) The total source potential to emit of all criteria pollutants are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

(b) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.13 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.14 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.15 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or

(2) A malfunction as described in 326 IAC 1-6-2; or

(3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.

(4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.17 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

(a) One (1) RV assembly area, processing finished recreational vehicles at a maximum rate of 1.5 vehicles per hour (36 vehicles per day);

(b) One (1) woodworking process, processing pre-finished lumber at a maximum rate of 600 pounds per hour; and

(c) Three (3) 0.6 MMBtu/hr natural gas fired space heaters, identified as A1, A2, and A3, with emissions exhausted through Stacks A1, A2, and A3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.1.1 VOC Emission Limit [326 IAC 8-1-6]

The owner or operator shall limit the VOC containing material usage from the materials not subject to the requirements of Condition D.1.2 such that the associated VOC emissions are less than or equal to twenty-five (25) tons per year, based on a 12 month rolling total. Compliance with this limit makes 326 IAC 8-1-6 not applicable in this case.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall be applied utilizing one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.3 Particulate Matter (PM), Woodworking Process [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the woodworking process for a process weight rate of 0.3 tons per hour, shall not exceed 1.83 lb/hr.

$E = 4.10 * P^{0.67}$

where: E = rate of emission in pounds per hour,
P = process weight in tons per hour (0.3 tons/hr)

D.1.4 Particulate Matter (PM), RV Assembly Area [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), the owner or operator shall, for all coating application areas in the RV assembly area except the Alpha 8011 and Alpha Sealant application areas, meet the following requirements:

(a) The owner or operator shall, apply each surface coating in accordance with the manufacturer's specifications.

(b) If overspray accumulates on the ground, the owner or operator shall:

(1) take corrective action and/or make adjustments so that no overspray is visibly detectable at the exhaust or accumulates on the ground;

and

(2) record all actions required as a result of the requirements of Part (b)(1) of this Condition and the changes in operation that are made to ensure that overspray is not visibly detected at the exhaust or accumulates on the ground.

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the emission units and any control devices.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions units of this source at this time. However, IDEM may require compliance testing when necessary. If testing is required by IDEM, compliance with the PM and VOC limits specified in Conditions D.1.1 and D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.7 Volatile Organic Compounds (VOC)

To determine compliance with the VOC emission limit of Condition D.1.1, the owner or operator shall:

(a) draft a list of all applicable materials that contain VOCs;

(b) obtain as-supplied and as-applied VOC data sheets for each material specified in the list required in Part (a) of this condition; and

(c) determine the individual material and entire source VOC emissions, and the 12 month rolling total VOC emissions as follows:

(1) Individual Monthly VOC Emissions:

Tons VOC/month = (density) lb/gal * (fraction VOC (excluding water)) * gal/month * 1/2000 ton/lb

(2) Source Monthly VOC Emissions:

Tons VOC/month = sum [individual monthly VOC emissions (tons/month)]

(3) 12 Month Rolling Total:

12 Month Rolling Total (ton/yr) = tons VOC this month (ton/mo) + tons VOC last 11 months (ton/month)

utilizing information obtained from the as-supplied and as-applied VOC data sheets and actual material usage for each applicable month.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.8 Record Keeping Requirements

(a) To document compliance with the VOC limit of Condition D.1.1, the owner or operator shall on a monthly basis:

(1) maintain and update as necessary, the materials list required in Part (a) of Condition D.1.7;

(2) maintain and update as necessary, the as-supplied and as-applied VOC data sheets required in Part (b) of Condition D.1.7; and

(3) maintain records of the monthly VOC emissions required in Part (c) of Condition D.1.7(c), including in the record:

(A)the applicable month and year,
(B)the monthly material usage in gallons per month,
(C)the fraction VOC of each material,
(D)the individual VOC emissions in tons per month,
(E)the total source VOC emissions in tons per month, and
(F)the 12 month rolling total emissions in tons per year.

Said records shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1.

(b) To document compliance with the PM overspray limit of Condition D.1.4, the owner or operator shall maintain records of all actions recorded as a result of the requirements of Condition D.1.4(b).

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**Forest River, Inc.**
Address:	**402 Lehman Avenue**
City:	**Topeka, Indiana 46571**
Phone #:	
MSOP #:	**087-15238-00052**

I hereby certify that Forest River, Inc. is:

9 still in operation.
9 no longer in operation.

I hereby certify that Forest River, Inc. is:

9 in compliance with the requirements of MSOP 087-15238-00052.
9 not in compliance with the requirements of MSOP 087-15238-00052.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____ __
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____
_____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Minor Source Operating Permit
Quarterly Report

Source Name: Forest River, Inc.
Source Address: 402 Lehman Avenue, Topeka, Indiana 46571
Mailing Address: P. O. Box 3030 Elkhart, Indiana 46515-3030
MSOP No.: 087-15238-00052
Facility: Entire Source
Parameter: VOC Emissions from the materials not subject to the requirements of 326 IAC 8-2-12
Limit: Less than 25 tons VOC/yr per twelve (12) month period

YEAR: _____

Month	VOC Emissions This Month (tons)	VOC Emissions From Previous 11 Months (tons)	VOC Emissions for Twelve (12) Month Period (tons)
1			
2			
3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for New Construction and Operation

Source Name:	Forest River, Inc. (Cherokee Division)
Source Location:	402 Lehman Avenue, Topeka, Indiana 46571
County:	LaGrange
SIC Code:	3792
New Source Operation Permit No.:	087-15238-00052
Permit Reviewer:	SDF

On September 6, 2002, the Office of Air Quality (OAQ) had a notice published in the LaGrange Standard, located in LaGrange, Indiana, stating that Forest River, Inc. had applied for a Minor Source Operating Permit (MSOP) for a recreational vehicle manufacturing operation. The notice also stated that the OAQ proposed to issue the permit and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On September 16, 2002, Forest River, Inc. submitted comments on the proposed MSOP. A summary of the comments and corresponding responses is as follows. All deleted information is struck-out and new language is indicated in bold type.

Comment 1:

Forrest River would like to change the maximum rate of 1.5 vehicles per hour to 36 vehicles per day.

Response 1:

The maximum hourly vehicle rate listed in the emission unit description is necessary because the production rate provides future permit reviewers the means of determining the baseline unrestricted potential to emit.

However, the Office of Air Quality does acknowledge that the description should include the fact that the daily rate is only 36 vehicles per day.

Therefore, the emission unit descriptions of Condition A.2 and Section D.1 shall be amended as follows to include both rates.

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) One (1) RV assembly area, processing finished recreational vehicles at a maximum rate of 1.5 vehicles per hour **(36 vehicles per day)**;

(b) One (1) woodworking process, processing pre-finished lumber at a maximum rate of 600 pounds per hour; and

(c) Three (3) 0.6 MMBtu/hr natural gas fired space heaters, identified as A1, A2, and A3, with emissions exhausted through Stacks A1, A2, and A3.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

(a) One (1) RV assembly area, processing finished recreational vehicles at a maximum rate of 1.5 vehicles per hour **(36 vehicles per day)**;

(b) One (1) woodworking process, processing pre-finished lumber at a maximum rate of 600 pounds per hour; and

(c) Three (3) 0.6 MMBtu/hr natural gas fired space heaters, identified as A1, A2, and A3, with emissions exhausted through Stacks A1, A2, and A3.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 2:

Condition D.1.4: This condition should be removed in it's entirety because these PM overspray requirements of 326 IAC 6-3-2 do not apply in this case.

Response 2:

The RV assembly area applies adhesives that are subject to the PM requirements of 326 IAC 6-3-2.

The coatings are applied as follows:

Surface Coating	Application Method
676 Spray Adhesive	Aerosol Can
Alpha 8011	Roll Coating
Alpha Sealant	Flow Coating
Cyclo Cleaner	Aerosol Can
Cyclo Spray Silicone	Aerosol Can
Enerbond Foam Adhesive	Aerosol Can
Enerbond Cleaner	Aerosol Can
Spray'n Go Paint	Aerosol Can
Sta-Put Adhesive	Aerosol Can

Pursuant to 326 IAC 6-3-1(b)(6), manufacturing processes that apply surface coatings using roll coating, are exempt from the requirements of 326 IAC 6-3. The Alpha 8011 surface coating is applied using roll coating. Therefore, the Alpha 8011 application area is exempt from the requirements of 326 IAC 6-3.

Pursuant to 326 IAC 6-3-1(b)(7), manufacturing processes that apply surface coatings using flow coaters, are exempt from the requirements of 326 IAC 6-3. The Alpha Sealant is applied using flow coating. Therefore the Alpha Sealant area is exempt from the requirements of 326 IAC 6-3.

All other coatings applied in the RV Assembly Area are applied using aerosol spray cans. These cans are not any of the exempted processes under 326 IAC 6-3-1 and the usage is greater than 5 gallons per day. Therefore, these remaining application areas are subject to the requirement under 326 IAC 6-3-2(d).

Pursuant to 326 IAC 6-3-2(d), surface coating processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device and shall be subject to the requirements of Parts (d)(1) and (d)(2). The aerosol can surface coating is coating that is done inside the building and is not directly vented to the outside. Therefore, it is determined that no, or very little, PM escapes into the air.

Therefore, it is determined that this method of operation is equivalent to PM emissions directly vented to the atmosphere, controlled by a dry filter system or water wash.

Thus, no additional controls shall be required.

Based on the above determination Condition D.1.4 shall be revised as follows to remove the requirement to have a control:

D.1.4 Particulate Matter (PM), RV Assembly Area [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), ~~the surface coating PM emissions shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. Said control device~~ **the owner or operator** shall**, for all coating application areas in the RV assembly area except the Alpha 8011 and Alpha Sealant application areas,** meet the following requirements:

(a) The owner or operator shall**, apply each surface coating,** ~~operate the control device~~ in accordance with the manufacturer's specifications.

(b) If overspray ~~is visibly detected at the exhaust or~~ accumulates on the ground, the owner or operator shall:

(1) ~~inspect the control device and do one (1) of the following no later than four (4) hours after such observation:~~

~~(A) repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground, or~~

~~(B)~~ **take corrective action and/or make adjustments** ~~operate the equipment~~ so that no overspray is visibly detectable at the exhaust or accumulates on the ground;

and

(2) record all actions **required** ~~taken~~ as a result of the **requirements of Part (b)(1) of this Condition** ~~inspection, including a list of all:~~

~~(A) repairs of the control device, or~~

~~(B)~~ **and the** changes in operation that are made to ensure that overspray is not visibly detected at the exhaust or accumulates on the ground.

Comment 3:

Condition D.1.5: The Preventive Maintenance Plan should be removed in its entirety.

Response 3:

The Office of Air Quality has determined that the Preventive Maintenance Plan (PMP) requirements under 326 IAC 1-6-1 and 326 IAC 1-6-3 apply to both emission units and add-on controls. Therefore, the PMP requirements under Condition D.1.5 are determined to be necessary and therefore will not be removed.

Comment 4:

Condition D.1.8(b): This Part should be removed in its entirety.

Response 4:

Part (b) of Condition D.1.8 requires the owner or operator to keep records of all actions recorded as a result of the requirements of Condition D.1.4(b).

In response to Comment 3, the aerosol spray can application areas have been defined as an equivalent control to the required dry filter and waterwash systems. Although no add-on controls are required, the owner or operator is still required to keep records of all actions recorded as a result of PM overspray being visibly detectable or on the ground (326 IAC 6-3-2(d)(2)).

Therefore, Part (b) of Condition D.1.8 shall not be removed.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit (MSOP)

Source Background and Description

Source Name:	Forest River, Inc. (Cherokee Division)
Source Location:	402 Lehman Avenue, Topeka, Indiana 46571
County:	LaGrange
SIC Code:	3792
New Source Operation Permit No.:	087-15238-00052
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application from Forest River, Inc. relating to the construction and operation of their recreational vehicle manufacturing operation.

Request

On January 16, 2002, Forest River, Inc. submitted an application for a new source recreational vehicle manufacturing operation consisting of the following:

(a) One (1) RV assembly area, processing finished recreational vehicles at a maximum rate of 1.5 vehicles per hour;

(b) One (1) woodworking process, processing pre-finished lumber at a maximum rate of 600 pounds per hour, with emissions controlled by a baghouse; and

(c) Three (3) 0.6 MMBtu/hr natural gas fired space heaters, identified as A1, A2, and A3, with emissions exhausted through Stacks A1, A2, and A3.

Existing Approvals

This proposed permit is the first approval for the source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit (MSOP) be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application.

Emission Calculations

SOURCE UNRESTRICTED POTENTIAL TO EMIT:

The unrestricted potential to emit (UPTE) from the proposed source includes VOC, PM, PM10, and HAP emissions from the RV assembly area, PM and PM10 emissions from the woodworking area, and combustion emissions from the space heaters.

The following table summarizes the UPTE from the proposed source. The detailed UPTE calculations follow the summary table.

Unit	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Single HAP tons/yr	Comb. HAPs (tons/yr)
RV Assembly Area	17.78	17.78	-	-	47.23	-	8.85	17.31
Woodworking Area	39.42	3.94	-	-	-	-	-	-
Space Heaters	neg.	0.10	neg.	0.80	neg.	0.70	0.01	0.01
Total	**57.20**	**21.82**	**neg.**	**0.80**	**47.23**	**0.70**	**-**	**17.32**

a. RV Assembly Area:

The following calculations determine the PM, PM10, VOC and HAP UPTE based on use of the worst case adhesive and solvent combination, the respective maximum gal/unit, the maximum units/hr, the chemical properties of the materials as obtained from the MSDS, emissions before controls, and 8760 hours of operation.

VOC: VOC (tons/yr) = lb/gal * fraction VOC * gal/unit * unit/hr * 8760 hr/yr * 1/2000 ton/lb
PM: PM (tons/yr) = lb/gal * gal/unit * unit/hr * (1 - wt% vol+H_2O) * (1 - TE) * 8760 hr/yr * 1/2000 ton/lb

Coating	Process/ Part	Part Type*	lb/gal	fraction VOC	fraction VOC + H_2O	TE	max gal/unit	max unit/hr	VOC ton/yr	PM ton/yr
676 Adhesive	Fabric	Plastic Wood	6.26	0.792	0.792	0.75	0.04	1.50	1.30	**0.09**
8011 Adhesive	Roofing	Plastic	8.35	0.006	0.21	0.75	1.08	1.50	0.36	**11.70**
Alpha Sealant	Roofing	Plastic	10.00	0.34	0.34	0.75	0.38	1.50	8.49	**4.12**
ABS Cleaner	Plumbing	Plastic Rubber	6.61	0.90	1.00	0.75	0.002	1.50	0.08	**0.00**
ABS Cement	Plumbing	Plastic Rubber	7.09	0.75	0.75	0.75	0.006	1.50	0.21	**0.02**
Aliphatic Adhesive	Roof/Trim	Plastic	9.49	0.67	0.67	0.75	0.47	1.50	19.63	2.42
Oak Stain	Final Finish	Wood	6.80	0.95	0.95	0.75	neg.	1.50	neg.	neg.
Spray Silicone	Mill Room Saws	Rubber Plastic	7.00	0.92	0.92	0.75	0.02	1.50	0.85	0.02
Alcohol	Final Finish	Rubber Plastic	6.70	1.00	1.00	0.75	0.0002	1.50	0.01	0.00

Geocell 2300	Trim/Final Finish	Rubber Plastic	7.91	0.35	0.35	0.75	0.73	1.50	13.28	6.16
Pipe Dope	Plumbing	Plastic	8.40	0.50	0.50	0.75	0.001	1.50	0.03	0.01
Mineral Spirits	Final Finish	Rubber Plastic	6.51	1.00	1.00	0.75	0.01	1.50	0.43	0.00
Spray N Go	Touch Up Paint	Plastic	6.08	0.75	0.75	0.75	0.003	1.50	0.09	**0.01**
Sta Put Adhesive	Drapery	Plastic	6.50	0.35	0.35	0.75	0.004	1.50	0.06	**0.03**
Enterbond Cleaner	Floor/Side wall	Rubber Plastic	7.98	0.96	0.96	0.75	neg.	1.50	neg.	**neg.**
SolidBond	Final Finish	Rubber Plastic	9.75	0.08	0.08	0.75	0.47	1.50	2.41	6.92
Seal Sealant	Plumbing	Rubber Plastic	11.00	0.00	0.40	0.75	0.002	1.50	0.00	0.02
Brake Cleaner	Brakes	Plastic	10.81	0.00	1.00	0.75	0.03	1.50	0.00	0.00
Eterbond 45 SF	Floor Sidewall	Plastic	10.00	0.00	0.00	0.75	0.11	1.50	0.00	**1.81**
								Total	**47.23**	**17.78**

PM is determined to be equal to PM10 in this case.

HAPs:

The following calculations determine the source HAP emissions based on the maximum hourly HAP emission rate, 8760 hours of operation, and emissions before controls.

HAP (tons/yr) = lb/hr * 8760 hr/yr * 1/2000 ton/lb

HAP	lb/hr	ton/yr
Cumene	0.26	1.14
Ethyl Benzene	0.002	0.01
Hexane	0.17	0.74
Methyl Chloroform	0.48	2.10
MEK	0.07	0.31
Toluene	2.02	**8.85**
Xylene	0.95	4.16
	Total	**17.31**

b. Woodworking Process:

The following calculations determine the PM and PM10 emissions based on a maximum production rate of 600 lb/hr, 15% of the wood processed is sawdust, 10% of the sawdust is PM, and 10% of the PM is PM10.

PM: 600 lb/hr * 0.15 * 0.10 * 8760 hr/yr * 1/2000 ton/lb = 39.42 tons PM/yr
PM10: 600 lb/hr * 0.15 * 0.10 * 0.10 * 8760 hr/yr * 1/2000 ton/lb = 3.94 tons PM10/yr

c. Space Heaters:

The following calculations determine the space heater emissions based on natural gas combustion, a combined maximum capacity of 1.8 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

1.8 MMBtu/hr * 8760 hr/yr * 1 E6 Btu/MMBtu * 1/1000 cf/Btu * 1/1E6 MMcf/cf * Ef lb poll/MMcf * 1/2000 ton poll/lb poll = ton poll/yr

	PM 1.9 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	**neg.**	**0.10**	**neg.**	**0.80**	**neg.**	**0.70**

HAP	tons/yr
Benzene	1.66E-5
Dichlorobenzene	9.46E-6
Formaldehyde	5.91E-4
Hexane	1.42E-2
Toluene	2.68E-5
Lead	3.94E-6
Cadmium	8.67E-6
Chromium	1.10E-5
Manganese	3.00E-6
Nickel	1.66E-5
Total	**0.01**

EMISSIONS AFTER CONTROLS:

The woodworking PM emissions are controlled for the purposes of complying with 326 IAC 6-3. The design efficiency is determined to be 99.9%.

The assembly area PM emissions are uncontrolled.

Based on the above emissions and the estimated emissions before controls, the emissions after controls are estimated as follows:

Woodworking Area:

39.42 tons PM/yr * (1 - 0.999) = 0.04 tons PM/yr
3.94 tons PM10/yr * (1 - 0.999) = neg. tons PM10/yr

Assembly Area:

Since the PM emissions from the assembly area are uncontrolled, the PM emissions after controls equal the PM emissions before controls.

Unit	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Single HAP tons/yr	Comb. HAPs (tons/yr)
RV Assembly Area	17.78	17.78	-	-	47.23	-	8.85	17.31
Woodworking Area	0.04	neg.	-	-	-	-	-	-
Space Heaters	neg.	0.10	neg.	0.80	neg.	0.70	0.01	0.01
Total	**17.82**	**17.88**	**neg.**	**0.80**	**47.23**	**0.70**	**-**	**17.32**

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the source PTE before controls based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	57.20
PM-10	21.82
SO_2	neg.
VOC	47.23
CO	0.70
NO_x	0.80

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)
Worst Case Single HAP	8.85
Worst Case Combined HAPs	17.32

All criteria pollutant UPTE are less than 100 tons/yr, no single HAP emissions exceed 10 tons/yr, and the combined HAP emissions do not exceed 25 tons/yr. However, the PM and VOC emissions exceed 25 tons per year. Therefore, the proposed source shall be permitted under a Minor Source Operating Permit (MSOP) pursuant to 326 IAC 2-5.1-3(a)(1)(E)(i) and (iv).

County Attainment Status

The source is located in LaGrange County.

Pollutant	Status
PM_{10}	attainment or unclassifiable
SO_2	attainment or unclassifiable
NO_2	attainment or unclassifiable
Ozone	attainment or unclassifiable
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. LaGrange County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2 and 40 CFR 52.21.

(b) LaGrange County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

New Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit	PM tons/yr	PM10 tons/yr	SO2 tons/yr	NOx tons/yr	VOC tons/yr	CO tons/yr	Worst Case Single HAP tons/yr	Comb. HAPs (tons/yr)
Source	17.82	17.88	neg.	0.80	<25	0.70	8.85	17.32
PSD Levels	250	250	250	250	250	250	-	-
Part 70 Levels	-	100	100	100	100	100	10	25

(a) This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.

(b) This new source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

(c) The VOC emissions from the materials that are not subject to 326 IAC 8-2-12 are limited to <23.7 tons per year based on a 12 month rolling total to avoid the requirements of 326 IAC 8-1-6.

25 tons VOC per year - VOCs from materials subject to 326 IAC 8-2-12 (1.30 tons/yr) = 23.7 tons VOC/yr

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):

There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) that apply to the proposed source.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):

There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 20 and 40 CFR Part 61) that apply to this proposed source.

40 CFR 63, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations:

40 CFR 63, Subpart JJ does not apply because the source is not a major source as defined in 40 CFR 63, Subpart A.

State Rule Applicability

(a) Entire State Rule Applicability:

(1) 326 IAC 1-6-3 (Preventive Maintenance Plan):

The proposed source is required to have a preventive maintenance plan for the emission units and control devices of the source.

(2) 326 IAC 2-4.1 (HAP Major Sources)

This source is not subject to the requirements of 326 IAC 2-4.1 because no single hazardous air pollutant (HAP) emissions exceed 10 tons per year, and the combined HAP emissions are less than 25 tons per year.

(3) 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not in one of the listed source categories, and does not emit more than 100 tons per year of any regulated pollutants.

(4) 326 IAC 5-1-2 (Opacity Limitations)

Opacity shall not exceed an average of 40% in any one 6 minute averaging period. Opacity shall not exceed 60% for more than a cumulative total of fifteen minutes.

(b) Individual State Rule Applicability:

(1) 326 IAC 6-3, RV Assembly Area:

Pursuant to 326 IAC 6-3-2(d), the surface coating PM emissions shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. Said control device shall meet the following requirements:

(a) The owner or operator shall operate the control device in accordance with the manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the owner or operator shall:

(1) inspect the control device and do one (1) of the following no later than four (4) hours after such observation:

(A) repair the control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground, or

(B) operate the equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground;

and

(2) record all actions taken as a result of the inspection, including a list of all:

(A) repairs of the control device, or

(B) changes in operation that are made to ensure that overspray is not visibly detected at the exhaust or accumulates on the ground.

(2) 326 IAC 6-3 (Process Operations), Woodworking Process:

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the woodworking process for a process weight rate of 0.3 tons per hour, shall not exceed 1.83 lb/hr.

$E = 4.10 * P^{0.67}$

where: E = rate of emission in pounds per hour,
P = process weight in tons per hour (0.3 tons/hr)

Based on the estimated UPTE, the hourly PM emissions are determined to be 0.01 lb/hr which is less than the limit of 1.83 lb/hr. Thus, compliance is determined to be achieved.

0.04 tons/yr * 1/8760 yr/hr * 2000 lb/ton = 0.01 lb PM/hr

(3) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

326 IAC 8-2-9 does not apply to the adhesive application systems because the parts coated are either plastic or wood, not metal.

(4) 326 IAC 8-2-10 (Surface Coating Emission Limitations, Flatwood Panel Manufacturing and surface finishing)

326 IAC 8-2-10 does not apply because the woodworking process is not a flatwood panel manufacturing and surface coating operation as defined in 326 IAC 8-2-10(a).

(4) 326 IAC 8-2-12 (Surface Coating Emission Limitations, Wood Furniture and Cabinet Coating):

Coating	Process/ Part	Part Type*	lb/gal	fraction VOC	fraction VOC + H_2O	TE	max gal/unit	max unit/hr	VOC ton/yr	PM ton/yr
676 Ad	Fabric	Plastic Wood	6.26	0.792	0.792	0.75	0.04	1.50	1.30	0.09
Oak Stain	Final Finish	Wood	6.80	0.95	0.95	0.75	neg.	1.50	neg.	neg.
								Total	**1.30**	**0.09**

The 676 adhesive and oak stain are surface coatings that are applied as part of a wood furnishing operation as defined in 326 IAC 8-2-12(a). Thus the application equipment associated with these materials are subject to the requirements of 326 IAC 8-2-12. Pursuant to 326 IAC 8-2-12, the owner or operator shall apply the wood adhesives and oak stains utilizing either airless spray, air-assisted airless, electrostatic spray, electrostatic bell or disc, heated airless, roll coat, brush or wipe, or dip and drain application.

(5) 326 IAC 8-1-6 (State BACT Limitations)

Coating	Process/ Part	Part Type*	lb/gal	fraction VOC	fraction VOC + H_2O	TE	max gal/unit	max unit/hr	VOC ton/yr	PM ton/yr
8011 Adhesive	Roofing	Plastic	8.35	0.006	0.21	0.75	1.08	1.50	0.36	11.70
Alpha Sealant	Roofing	Plastic	10.00	0.34	0.34	0.75	0.38	1.50	8.49	4.12
ABS Cleaner	Plumbing	Plastic Rubber	6.61	0.90	1.00	0.75	0.002	1.50	0.08	0.00
ABS Cement	Plumbing	Plastic Rubber	7.09	0.75	0.75	0.75	0.006	1.50	0.21	0.02
Aliphatic Adhesive	Roof/Trim	Plastic	9.49	0.67	0.67	0.75	0.47	1.50	19.63	2.42
Spray Silicone	Mill Room Saws	Rubber Plastic	7.00	0.92	0.92	0.75	0.02	1.50	0.85	0.02
Alcohol	Final Finish	Rubber Plastic	6.70	1.00	1.00	0.75	0.0002	1.50	0.01	0.00
Geocell 2300	Trim/Final Finish	Rubber Plastic	7.91	0.35	0.35	0.75	0.73	1.50	13.28	6.16
Pipe Dope	Plumbing	Plastic	8.40	0.50	0.50	0.75	0.001	1.50	0.03	0.01
Mineral Spirits	Final Finish	Rubber Plastic	6.51	1.00	1.00	0.75	0.01	1.50	0.43	0.00
Spray N Go	Touch Up Paint	Plastic	6.08	0.75	0.75	0.75	0.003	1.50	0.09	0.01
Sta Put Adhesive	Drapery	Plastic	6.50	0.35	0.35	0.75	0.004	1.50	0.06	0.03
Enterbond Cleaner	Floor/Side wall	Rubber Plastic	7.98	0.96	0.96	0.75	neg.	1.50	neg.	neg.
SolidBond	Final Finish	Rubber Plastic	9.75	0.08	0.08	0.75	0.47	1.50	2.41	6.92
								Total	**45.93**	**33.24**

The above VOC emitting materials have a combined potential of 45.93 tons per year. Since no other Article 8 rules apply to these materials and the potential emissions are greater than the applicable level of 25 tons per year, 326 IAC 8-1-6 applies.

However, the source has opted to limit the VOC emissions from the materials to less than 25 tons per year, making the 326 IAC 8-1-6 requirements not applicable.

In order to demonstrate compliance with the requirements, the owner or operator shall keep records of the as supplied and as applied VOC data sheets, a list of the VOC emitting materials used each month, the amount of material used each month, the VOC emissions generated by each coating and solvent, and the combined monthly VOC emissions.

The owner or operator shall be required to submit quarterly reports.

Conclusion

The RV manufacturing operation shall be constructed and operated according to the requirements specified in proposed **MSOP No. CP-087-15238-00052**.